



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/383,629	08/26/1999	MAZDA SALMANIAN	71493-582	6818

7590 10/02/2002

SMART & BIGGAR
P O BOX 2999 STATION D
900-55 METCALFE STREET
OTTAWA, K1P5YP
CANADA

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 10/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/383,629

Applicant(s)

SALMANIAN, MAZDA

Examiner

Dmitry Levitan

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not provide sufficient details to enable a skilled in the art to make and use the invention because it ^{does} ~~is~~ not adequately describe how to implement FER estimates into a MAC layer device.

The specification does not provide enough details about the structure and operation of the elements associated with the above identified claimed features to enable one skilled in the art to make and use the invention without undue experimentation.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 14, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims do not specify any structures that would define the

claimed device. Furthermore, claims 14, 15 and 16 are dependent claims of claim 1 that is directed to a method and does not provide any limitations for a device structure.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Chuah (US 6,226,277).

Chuah teaches a method for performing call admission control (Fig. 2 and col. 8 lines 23-39) upon receipt of a request for a new session (col. 10 lines 37-62) comprising:

Selecting media access control MAC layer parameter (load metric of broadcast message 360 on Fig. 3 and col. 10 lines 63-67 and col. 11 lines 1-17), which is affected by all different session types in a manner for use as a basis of call admission control (number of remote nodes or equivalent number of active remote nodes col. 11 lines 17-20);

Making an estimate of said MAC parameter which will result should the new session be admitted (col. 4 lines 60-65 and col. 5 lines 4-17); and

Admitting or denying the new session on the basis of the MAC layer parameter (col. 11 lines 20-21).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 10, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scholefield (US 6,216,006) in view of Beming (US 5,740,537) .

Regarding claims 1 and 19, Scholefield teaches all claim limitation of a method and computer code of performing call admission control upon a receipt of a request for a new session comprising:

Making an estimate of a new system QoS (bandwidth on Fig. 3 and col. 2 lines 64-67, col. 3 lines 1-8; col. 3 lines 54-57) which will result should new session be admitted (recursive estimator on Fig. 4 and col. 4 lines 6-17); and

Deciding to admit or deny the new session on the basis of the new system QoS estimate (col. 4 lines 18-20).

Regarding claims 2 and 20, Scholefield teaches making an estimate of a previous system QoS (network measured load 30 on Fig. 3 and col. 3 lines 58-67);

Determining the estimate of a degradation in the system should new session be admitted

(Effective bandwidth of new service request 32 on Fig. 3); and

Combining the estimate of degradation to the previous system QoS to obtain the estimate of total system (un-used bandwidth 36 on Fig. 3 and col.4 lines 1-5).

Regarding claim 3, Scholefield teaches making an estimate of a previous system QoS at the time of the request comprises measuring the system QoS (col. 4 lines 34-48)

Regarding claim 4, Scholefield teaches starting with previous system QoS equal to initial system QoS (admission grant on Fig. 1 and col. 4 lines 33-35);

Each time a session is admitted or ended adjusting a degradation reduction for the session from the previous system QoS (step 160 on Fig. 1 and col. 4 lines 35-48).

Regarding claim 10, Scholefield teaches comparing the new QoS estimate (network measured load 30 and effective bandwidth 32 on Fig. 3 col. 3 lines 58-67) to a target QoS (theoretical channel capacity 34 on Fig. 3 and col. 4 lines 1-5) and admitting or denying the session based on the comparison.

|| Scholefield does not teach using frame error rates (FER) as a QoS determiner .

Beming teaches using frame error rates (FER) as a QoS determiner (col. 6 lines 45-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using frame error rates (FER) as a QoS determiner of Beming to the system of Scholefield to improve the system performance in interference environment.

9. Claims 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beming in view of Scholefield.

Art Unit: 2662

Regarding claims 15 and 18, Beming teaches all claim limitation of a call admission apparatus or base station (control device 22 on Fig. 1 and col. 5 lines 40-45) comprising:

An input device operable to receive a request for a new session (communication quality determiner 24 on Fig. 1 and col. 5 lines 45-55); and

A processing element operable to make a frame error rate (col. 6 lines 45-54) estimate (additional call admitter 28 on Fig. 1 and col. 5 lines 55-62).

Regarding claim 16, Beming teaches a base station controller (communication quality determiner 24 and additional call admitter 28 on Fig. 1) operable to make a frame error rate estimate.

Beming does not teach to estimate a new system FER estimate, which will result should the new session be admitted and decide to admit or deny the new session on the basis of the estimate. .

Scholefield teaches to estimate a new system QoS, which will result should the new session be admitted and decide to admit or deny the new session on the basis of the estimate. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a new system QoS estimate of Scholefield to the system of Beming to improve the system admission control.

Allowable Subject Matter

10. Claims 5-9 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chuah 6,377,548 Method for admitting new connections based on measured quantities of multiple access system for communications networks.

Ueda 6,044,072 CDMA communication system having means for controlling access in dependence on communication quality.

Ayyagari 6,278,701 Capacity enhancement for multi-code CDMA with integrated services through quality services and admission control.

Ishikawa 5,838,671 Method and apparatus for call admission control in CDMA mobile communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 703-305-4384. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

Application/Control Number: 09/383,629

Page 8

Art Unit: 2662

Dmitry Levitan
Patent examiner.
September 30, 2002

A handwritten signature in black ink, appearing to read 'H. Kizou', with a stylized flourish at the end.

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600